

Snow, D. W. (Ed.). 1978. *An Atlas of Speciation in African Non-passerine Birds*. London: Brit. Mus. (Nat. Hist.).

Young, Nicholls, Mendelsohn, 1979. Quoted in "Recent Field Notes" in *Albatross* 254: 10.

Address: Dr. Richard Liversidge, P. Richardson and A. Gubb, McGregor Museum, Box 316, Kimberley 8300, South Africa.

© British Ornithologists' Club 1981.

Brightly coloured plumage in female manakins (*Pipra*)

by Gary R. Graves

Received 9 June 1980

Female manakins (*Pipra*) are feathered primarily in drab olives and greys and lack the contrasting bright, often glossy crown patches found in males. However, adult females with spots of brightly coloured "male-like" plumage have been previously reported in 5 of 16 recognized species of *Pipra* (*erythrocephala*, Snow 1962, Wetmore 1972; *mentalis*, Wetmore 1972; *pipra*, Zimmer 1936, Haverschmidt 1971; *aureola*, Haverschmidt 1965; *filicauda*, Schwartz & Snow 1978).

The purpose of this note is to add 5 additional species to the list of female *Pipra* that occasionally exhibit brightly coloured feathers, and to call attention to the possible genera-wide occurrence of such characters.

A pooled sample of 162 adult female *Pipra* (11 species) with complete gonad and skull ossification data from Louisiana State University Museum of Zoology was carefully examined for brightly coloured feathers on the crown,

TABLE I

Numbers (percentages) of female manakins (*Pipra*) in plumage categories (see text).

Species	Categories				Crown colour in males
	1	2	3	4	
<i>erythrocephala</i>	16 (84)	3 (16)	—	—	Yellow
<i>rubrocapilla</i> *	4 (80)	1 (20)	—	—	Scarlet
<i>mentalis</i>	13 (50)	12 (46)	1 (4)	—	Scarlet
<i>chloromeros</i> *	11 (73)	3 (20)	1 (7)	—	Scarlet
<i>pipra</i>	13 (100)	—	—	—	White
<i>isidorei</i>	3 (100)	—	—	—	Bluish-white
<i>caeruleocapilla</i> *	3 (75)	1 (25)	—	—	Light Blue
<i>coronata</i> *	33 (81)	7 (17)	1 (2)	—	Blue
<i>aureola</i>	1 (50)	—	1 (50)	—	Crimson
<i>fasciicauda</i> *	14 (64)	4 (18)	2 (9)	2 (9)	Scarlet
<i>filicauda</i>	7 (64)	3 (27)	1 (9)	—	Scarlet
Totals	119 (74)	34 (21)	7 (4)	2 (1)	

*=Females with brightly coloured feathers reported for first time.

nape and auricular region (Table 1). These feathers, often seen only after careful scrutiny, are similar in colour and glossiness to those found on respective males. Specimens were classified in 4 categories: (1) those with

no brightly coloured feathers; (2) feather(s) visible only after close examination; (3) feathers easily observed at arm's length; and (4) coloured feathers highly visible even under field conditions. Specimens in categories 3 and 4 resemble immature males with incoming crown feathers.

"Male-like" plumage is also known in females of *Chiroxiphia*, *Manacus* and *Chloropipo unicolor* (Wetmore 1972 and pers. obs.). The above data suggest that a larger sample will reveal that all *Pipra* species have some females with brightly coloured feathers, a small percentage of which may resemble immature males.

Preliminary information from museum specimen tags also suggests that sex determination on the basis of iris colouration in female or immature plumaged manakins is not reliable.

Although the adaptive significance, if any, of a single brightly coloured feather is unknown, females that resemble immature males may have a confounding effect in complex manakin social systems, even at low frequencies of occurrence. Clearly then, controls in lek behaviour study should routinely include laparotomy to sex individuals in female or immature plumage.

I thank J. V. Remsen, J. P. O'Neill and S. Y. Graves for comments on an earlier draft.

References:

- Haverschmidt, F. 1965. Variations in plumage of male and female *Pipra aureola*. *Auk* 82: 502.
- 1971. Variations in plumage of male and female White-crowned Manakins *Pipra pipra*. *Bull. Brit. Orn. Cl.* 91: 18.
- Schwartz, P. & Snow, D. 1978. Display and related behavior of the Wire-tailed Manakin. *Living Bird* 17: 51-78.
- Snow, D. 1962. A field study of the Golden-headed Manakin (*Pipra erythrocephala*) in Trinidad, W. I. *Zoologica* 47: 183-198.
- Wetmore, A. 1972. *Birds of the Republic of Panama*. Pt. 3. Washington, D.C.: Smithsonian Institution Press.
- Zimmer, J. 1936. Notes on the Pipridae. *Amer. Mus. Novitates* 889: 29 pp.
- Address: Gary R. Graves, Museum of Zoology, Louisiana State University, Baton Rouge, LA 70893, U.S.A. Present address: Department of Biological Science, Florida State University, Tallahassee, Florida 32306, U.S.A.

© British Ornithologists' Club 1981.

We would like to point out that the note which appeared in *Bull. Brit. Orn. Cl.* (1980) 100(3): 205 relating to the first *Puffinus tenuirostris* records from the Malay Peninsula had previously been recorded and published by C. B. Frith (*Emu* 1978(2): 95-97—'Short-tailed Shearwater, *Puffinus tenuirostris* in the Andaman Sea area, Indian Ocean'). We wish to apologise to Mr. Frith for the misunderstandings which led to this regrettable oversight.

P. R. Colston

J. F. Monk